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The Collins Wireless Telephone

A. Frederick Collins ... Tragic Genius ?



A. Frederick Collins

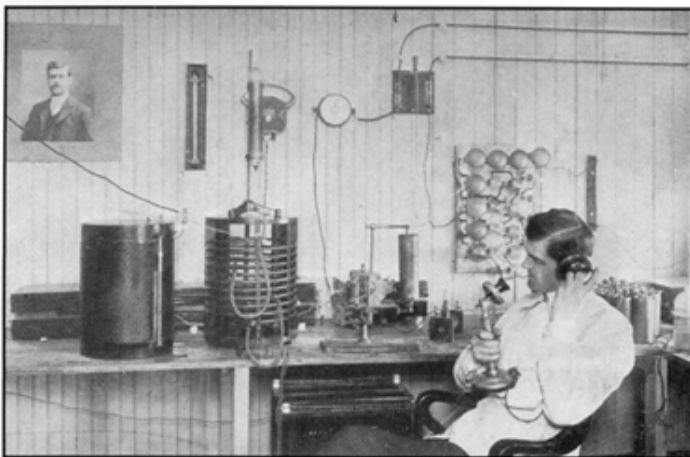
It had been two years since Marconi's successful wireless telegraph transmission across the Atlantic ocean, and another year would pass before the invention of the vacuum tube. Wireless Telegraphy, though still in its infancy, held great promise for the future. Men with names like DeForest, Edison, Fessenden, Marconi, and Tesla were working intensely to make wireless a commercially viable alternative

to the wired telegraph.

At the same time, a much smaller group was attempting to take wireless to the next logical step – a wireless telephone. In May, 1903, one of these men, A. Frederick Collins, formed the Collins Marine Wireless Telephone Co, and soon after changed the name of the company to Collins Wireless Telephone Co. As he prepared to take the company public, this technical visionary formed partnerships with businessmen of questionable character - men more interested in making a killing in wireless stock speculation than in building a successful company.



His first system was known as the "Inductive System" and featured coils of insulated wire four to five feet in diameter. The transmitting coil carried current modulated by a microphone, which produced a magnetic field that varied with the speech of the speaker. The varying magnetic field produced an electric current in the receiving coil placed nearby, reproducing the speaker's voice in a telephone receiver.



The Collins Wireless Telephone, A. Frederick Collins at microphone in the Newark, N.J. Laboratory.

Collins toured the United States, putting on demonstrations and selling stock in the Collins Wireless Telephone Co. The company made [wild claims](#) about his technology and was vocal in predicting the downfall of telegraph stocks such as Marconi. Usually two adjoining hotel rooms

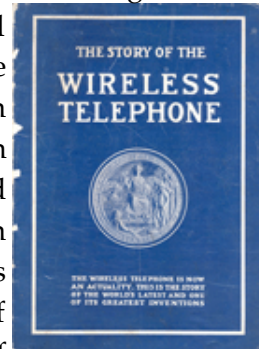
were rented for the demonstration, placing the coils on opposite sides of a wall. Celebrities and government officials would be invited to demonstrate the apparatus. These demonstrations were spectacular and resulted in appreciable stock sales. Unfortunately the money received was used by the company to cover the expenses of marketing its stock and to promote further speculation, not for building the assets of the company for the benefit of the stockholders.

From 1900 to 1909 Collins wrote an incredible number of [technical articles](#) for science and trade journals, as well as best selling wireless books including "Wireless Telegraphy" (1905), "Manual of Wireless Telephony and Telegraphy" (1909), and "Design and Construction of Induction Coils" (1909.)



William Jennings Bryan and Mayor Goldwater,
Being sold on the Collins Inductive Wireless Telephone
Prescott, Arizona, Sept 19, 1909

In 1908 Collins issued a two part catalogue which described induction and conduction equipment in the first part, a true wireless set in the second part. He used an arc to generate the carrier and modulated it by a carbon microphone. He claimed this unit could span a distance of eighty miles with a power of 2.4 KW.



The company had a small shop in Newark, N.J. where demonstration equipment was built but little apparatus was ever sold. In December, 1909 Collins Wireless Telephone Company became a part of the Continental Wireless Tel. & Tel. Company, with A. Frederick Collins as Technical Director. The stock prospectus promised A Collins wireless telephone was to be installed in each Continental station. None were installed.

Stock Fraud

In December, 1911 four officers of the Continental Wireless Co. were indicted for using the mails to defraud in selling worthless stock.

According to the trial records, they were charged with 5 counts in:

1. Selling worthless stock in the Collins Wireless Telephone Co.
2. Persuading owners of Collins stock to buy worthless Continental stock.
3. Selling worthless bonds of the Continental Co.
4. Selling worthless Continental stock.

In addition, A. Frederick Collins was charged with giving a fraudulent demonstration of his wireless telephone on Oct. 14, 1909 at the Electrical Show in Madison Square Garden, New York, for the purpose of selling stock in the Collins Wireless Telephone Co.





Collins Exhibit at Madison Square Garden

It was developed at the trial that the four Collins officers had claimed in their prospectus that the Collins wireless telephone had been perfected to such an extent that in a community equipped with it, any two subscribers could talk to each other with total exclusion of all other subscribers, that the Collins wireless telephone would do away with all central exchanges, the necessity for wire lines, etc, that an automobile so equipped would be in constant touch with a garage so as not to be stranded in case of trouble, that because of the lower cost of the wireless telephone, with no wires needed, the telephone and telegraph systems would soon be put out of business and that the demand for the

equipment would increase so rapidly that the stock price would quickly increase. Click [here](#) to see an example of these claims.

Four officers were convicted on all five counts. Three were fined and sentenced on January 10, 1913, to prison terms of up to four years. This was the end of the Continental Wireless Tel. & Tel. Co.

A. Frederick Collins was sentenced to three years in jail in Atlanta. After serving one year he was released.. Before his conviction he had been a respected engineer, considered an authority on wireless in general and a specialist in wireless telephony. In his later career he wrote an amazing number of books on a variety of subjects such as electricity, wireless, astronomy and many other topics. He is most well known for "The Radio Amateur's Handbook," still in print and in it's 82nd edition!

The collapse of Continental was mirrored by the downfall of other companies such as United Wireless and DeForest. The era of bogus stock selling had come to an end.

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